

ALT-MSA 2006 HANDBOOK PART 7: INSTRUCTION AND SELECTION OF ARTIFACTS THAT DEMONSTRATE ATTAINMENT OF MASTERY OBJECTIVES

Part 7 of the ALT-MSA 2006 Handbook describes the processes that the TET uses in Step 3 to instruct students, assess the attainment of Mastery Objectives, and select artifacts representative of student achievement (summarized in Figure 7-1).

Figure 7-1

Step 3 September 2005 through March 15, 2006	
Activities	Handbook References
<ul style="list-style-type: none">• TET instructs and assesses Mastery Objectives, selects artifacts, and compiles portfolio.	Parts 4, 7, and 8

CONDUCT INSTRUCTION FOR MASTERY OBJECTIVE ATTAINMENT

(September 1, 2005 – MARCH 15, 2006)

Instruction on the Mastery Objectives should begin as soon as they have been completed and reviewed by the principal or designee.

- The development of the ALT-MSA portfolio should be conducted within the context of the ongoing daily instructional program.
- TEs are neither expected nor encouraged to work on any component of the ALT-MSA Portfolio development process outside the school or after regular working hours.
- The ALT-MSA Portfolio can only be constructed within the context of daily instruction with the student and in collaboration with the TET.

The TET shares the development and modification of grade-level and age appropriate materials, data collection sheets, and instructional strategies.

- Grade-level content standards are the starting point for teachers as they begin to plan instruction with student achievement of standards in mind.
- Instruction must align with grade-level curriculum content, grade- and age-appropriate instructional activities, and grade- and age-appropriate instructional materials.
- Modifying or reducing the complexity of objectives, learning activities, materials, and increasing the time to learn will foster the student's access to grade-level content standards.

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Plan how each objective will be taught and assessed, and the type of artifact that would best reflect evidence of mastery.

- General education teacher team members can contribute ideas about how they teach and assess similar objectives with same age and grade-level peers.
- General education teachers can provide a curricular and grade-level context for teaching and assessing Mastery Objectives.
- Using a specific curricular context helps TEs teach the Mastery Objectives and select the type of artifacts that could be submitted as evidence of mastery.
- TEs who teach in a special school or center could collaborate with reading and mathematics instructional specialists in the central office and with general education colleagues in comprehensive schools.

MONITOR PROGRESS AND REVISE MATERIALS AND STRATEGIES AS NEEDED

As instruction continues and data are collected for the ALT-MSA, these data should be used to monitor student progress and revise materials and instructional strategies to assist the student in learning the skills for the ALT-MSA as well as other instructional objectives.

Instructional practices that may foster learning for students who are participating in the ALT-MSA include:

- providing assistive technologies to ensure the student has access to the curriculum materials that same grade and age peers have.
- learning and interacting with peers who may be participating in similar activities.
- involving the student in the development of the ALT-MSA, where appropriate, including making choices and solving problems.
- fostering student learning and independence by allowing the student to manipulate the instructional materials and be “in charge” of the Mastery Objective demonstration, providing adequate “wait time” for student to respond, and decreasing unnecessary teacher intervention during the Mastery Objective demonstration.
- fostering student independence by using the least intrusive prompts and support necessary and using supports that are typically available in the environment or setting where instruction occurs.
- linking reading and mathematics instruction to other taught or targeted outcome areas will more likely result in student mastery of the reading and mathematics objectives. Other content areas, such as science, social studies, art, music, health, and physical education, provide students and teachers the real-life, authentic context that will promote learning of reading and mathematics.

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ASSESSMENT AND SELECTION OF ARTIFACTS FOR ALT-MSA PORTFOLIO

Artifacts are the evidence that the student has attained or displays the status of attainment of the reading and mathematics Mastery Objectives.

- Artifacts are collected throughout the test window and placed in the Portfolio in Sections 3 and 4.
- The types of artifacts that may be submitted, the required components of each type of artifact, and how artifacts are scored are described below.
- The student's reading and mathematics Mastery Objectives and artifacts must be aligned with grade-level curriculum content, grade- and age-level instructional activities, and grade- and age-appropriate materials.
- Although the content, activities, and materials may be modified these must be consistent with and reflect the Content Standards at the student's grade-level.

ACCEPTABLE as Artifacts for Evidence of Mastery

For each Mastery Objective, evidence that indicates the student has mastered the objectives must be included in the portfolio. It is important to select the type of artifact that best displays evidence that student is demonstrating the skill in the Mastery Objective.

There are 4 types of artifacts or evidence that may be submitted:

- videotape (**at least two videotaped artifacts, one in reading and one in mathematics are required for each ALT-MSA portfolio.**)
- audiotape
- student work (Original)
- data collection chart (Original)

UNACCEPTABLE as Artifacts

Artifacts that **cannot** be submitted as evidence of mastery are listed below. Artifacts will be scored as "Not Mastered" for the objective if these types of artifacts are all that is submitted for a Mastery Objective.

- checklists
- photographs of the student performing the objective
- narrative description of the student demonstrating the Mastery Objective
- any artifact that does not contain all the required Mastery Objective components (Part 5) or required artifact component (Part 7, listed below) as described in this *ALT-MSA 2006 Handbook*

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ARTIFACT REQUIREMENTS

REQUIRED ARTIFACT ELEMENTS

The following **MUST** be recorded or evident on each artifact. Artifacts cannot be scored “mastered” if they are missing any of the required information.

- (1) student’s name,
- (2) date instruction started toward Mastery Objective,
- (2) date artifact was constructed including month, day, and year,
- (3) Mastery Objective being assessed,
- (4) % achievement of assessed Mastery Objective-the accuracy score,
- (5) level of prompt used,
- (6) key to interpret TE notations,
- (7) page number that corresponds to the Table of Contents,
- (8) the observable and measurable student response, and
- (9) alignment and connection to grade-level curriculum materials.

REQUIRED VIDEOTAPING

Two artifacts must be videotaped, one in reading and one in mathematics. The TET determines which Mastery Objectives will be videotaped. Specific requirements for the contents of the videotaped artifacts are provided on page 7-5 of this *ALT-MSA 2006 Handbook*.

REQUIRED DOCUMENTATION OF APPROPRIATE PROMPT LEVEL

To be considered “Mastered” the prompt level on the artifact must not exceed the prompt level indicated in the Mastery Objective.

NOTE: An objective that requires a “full physical” prompt cannot be scored “Mastered” unless documentation clearly demonstrates that consistent instruction to reduce the need for full physical prompts, including use of assistive technologies, has been explored and implemented during the test window. TETs are encouraged to explore the full range of assistive technologies to support student learning and demonstration of skills. A data collection form that may be used for this purpose is on 4–16.

At the end of the testing window (March 15, 2006), each student’s portfolio **must** be complete and submitted to the STC.

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SPECIFIC VIDEOTAPED-ARTIFACT REQUIREMENTS

Videotape is a required artifact for ALT-MSA. Each student must be videotaped demonstrating mastery of at least two objectives, **one from a reading Content Standard** and **one from a mathematics Content Standard**. The TET will select the objectives that will be videotaped. The videotape is the artifact for these two objectives. Other Mastery Objectives may also be videotaped and submitted as evidence of mastery.

REQUIRED COMPONENTS ON VIDEOTAPE

The following must be included on the videotape:

- **Before** the student demonstrates the Mastery Objective he or she must:
 - (1) introduce him/herself, if possible,
 - (2) state the date- month, day, and year,
 - (3) state the date instruction on the Mastery Objective was started,
 - (4) state the objective being assessed, and
 - (5) grade-level alignment and connection to curriculum and materials.
- **After** the student demonstrates the Mastery Objective:
 - (6) state the level of prompt used, and
 - (7) state the accuracy score of the student's demonstration of the Mastery Objective. **NOTE: Generic statements by the TE such as "Good job" are NOT an accuracy score.**

GENERAL VIDEOTAPE REQUIREMENTS

Tape the student's demonstration of the Mastery Objective exactly as the Mastery Objective is written.

- If the Mastery Objective states that the student will demonstrate the skill a specific number of times or that a specific number of items will be presented, the specified number of times and items must be evident in the videotape.
- The student's face and hands and the materials being used must be evident on the videotape.
- Both the audio and visual components of the videotape must be present.
- The videotape will be scored by rating the student as "mastered" or "not mastered" based on their demonstration of the skill in relation to the Mastery Objective.
- Videotaped demonstrations of Mastery Objectives may be no longer than 5 minutes for each objective. If the student response is not observed by the scorer within 5 minutes, the artifact will be scored "not mastered." Only the student demonstration of the Mastery Objective should be included on the videotape; not an entire activity or lesson.

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REQUIREMENT OF ONE STUDENT PER TAPE

Only one student may be assessed at a time and recorded on the videotape.

- Videotapes with more than one student being assessed will not be scored and the students will receive a “not mastered” for that Mastery Objective.
- If students’ videotapes are placed in the incorrect portfolios, the correct portfolios will not be located.

OTHER VIDEOTAPING REMINDERS

Remember to:

- check the accuracy of the time and date on the camera. An incorrect date or time may render the videotape non scorable.
- check to see that the student’s response is evident. Scorers need to observe the student’s face and hands and hear or see the student’s response to determine mastery of the objective.
- check to see that both audio and visual of the student are present on the videotape.

INFORMING PARENTS/GUARDIANS ABOUT VIDEOTAPING

Parents/guardians should be informed that

- videotapes are required for the ALT-MSA,
- only scorers who have signed Non-Disclosure Agreements will view the videotapes, and
- the videotapes are secured and destroyed after scoring.

Parents are not “asked for permission” to videotape their student for the ALT-MSA. However, if a parent/guardian states in writing that they will not allow their child to be videotaped, the following procedures must be followed for the mandated videotaped artifacts:

1. Three professional staff must observe the student demonstrate the selected reading and mathematics Mastery Objectives. One observer may be the student’s primary teacher, another observer may be a member of the professional instructional team who is providing direct service to the student, or another teacher, and the third observer must be a district representative who is not working in the student’s school.
2. Each observer will record a detailed observation of the entire student performance of the target Mastery Objectives. All observers must review their written observations for accuracy and completeness to be certain that all observed components of the written Mastery Objective are included in their observation. Observers will print and sign their names at the end of the recorded observation. The student’s name, grade, school, and Mastery Objective must be included at the beginning of the observation.

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SPECIFIC AUDIOTAPED-ARTIFACT REQUIREMENTS

The TET may choose to submit certain artifacts on audiotape. (Note: Audiotape is NOT an alternative to videotape). The audiotape will be scored by rating the student as “mastered” or “not mastered” based on their demonstration of the skill in relation to the Mastery Objective. If the target student behavior is not observed within 5 minutes, the Mastery Objective will be scored “not mastered.” The TE must review the audiotape to determine that the student’s response is audible.

REQUIRED COMPONENTS ON AUDIOTAPE

The following must be included on the audiotape:

- **Before** the student demonstrates the Mastery Objective:
 - (1) the student must introduce him/herself, if possible,
 - (2) state the date- month, day, and year,
 - (3) state the date instruction on the Mastery Objective was started,
 - (4) state the objective being assessed, and
 - (5) state the grade-level alignment to curriculum and materials.
 - **After** the student demonstrates the Mastery Objective:
 - (6) state the level of prompt used, and
 - (7) state the accuracy score of the student’s demonstration of the Mastery Objective.
- NOTE: Generic statements by the TE such as “Good job” are NOT an accuracy score.**

Audiotape the student’s demonstration of the Mastery Objective exactly as the Mastery Objective is written. If the Mastery Objective states the student will demonstrate the skill a specific number of times or a specific number of items will be presented, the specified number of times and items must be evident on the audiotape.

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REQUIREMENTS FOR STUDENT WORK (ORIGINALS, NOT COPIES)

Student Work (original, not photocopied) that clearly reflects attainment of the Mastery Objective serves as direct evidence that the student has mastered the objective.

- TEs are cautioned about submitting worksheets such as an activity sheet from an external source, like a workbook, textbook, or periodical on which a student is required to recall and repeat information, select a pre-determined response, or provide limited or brief responses (e.g., Circle a selection, identify a statement as true/false, fill in a blank). Commercially produced materials may, however, be useful during instruction for the purpose of student practice
- If commercial materials are used, TEs must assure that they align with the individualized Mastery Objectives written by the TEs for a specific student.
- If the artifact does not align with the Mastery Objective it will be scored “not mastered.”
- A student’s dictated response, recorded verbatim, may be accepted as student work, **only** if the response required is lengthy, i.e., sentence-length response to questions and the student cannot write the response him/herself. If less than sentence length responses are required, the student responses may be recorded on data charts, videotape or audiotape. The verbatim-dictated response must be recorded next to the questions or stimulus the student must respond to. The TE must note on the artifact that the response was dictated by the student. The TE must sign the artifact below the responses they recorded for the student.
- Any TE markings on student work that indicate the correctness of a response must be clear to the scorer. TEs must provide a key showing what specific notations used on student products or data collection charts represent (e.g., C/√/+ = correct response; X/- = incorrect response).
- Artifacts must include all of the required components (as previously noted on page 7-4) as follows:
 - (1) student’s name,
 - (2) date instruction started toward Mastery Objective,
 - (2) date artifact was constructed including month, day, and year,
 - (3) Mastery Objective being assessed,
 - (4) % achievement of assessed Mastery Objective-the accuracy score,
 - (5) level of prompt used,
 - (6) key to interpret TE notations,
 - (7) page number that corresponds to the Table of Contents,
 - (8) the observable and measurable student response, and
 - (9) alignment and connection to grade-level curriculum materials.

The student work sample in Figure 7-2 illustrates these required components.

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Figure 7-2: Student Work Sample

Student's Name → Jody

Date → 2-18-04

MOS #9 → I

Criteria for Mastery → Prompt Level Indicated

Mastery Objective → Mastery Objective 9 Given a variety of coins and the price of an item in a vending machine, the student will determine the different coin combinations needed to purchase the item with 80% accuracy.

Directions: The student will be given a variety of coins and asked to make 5 combinations of coins, each combination equaling the amount of money needed to purchase the item. The teacher/observer will write the coin combinations the student made.

Vending machine item: Crackers Cost: .50

COMBINATIONS:

1. 5 dimes = \$.50
2. 2 quarters = \$.50
3. 1 quarter, 2 dimes, 1 nickel = \$.50
4. 8 nickels, 1 dime = \$.50
5. 10 nickels = \$.50

Key to response → C = Correct Response

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Date instruction started: 11-5-03
Grade-level alignment: Grade 3

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REQUIREMENTS FOR DATA CHARTS

Data charts must be original, not photocopied, typed, or word-processed. These should display evidence of instruction and learning over time and document student demonstration and attainment of the Mastery Objective.

- The data chart must show evidence of instruction prior to attainment of the criterion level and attainment of the criterion level.
- Do not use wording such as “trial” or “session.”
- Record the specific student behavior or skill being measured.

REQUIRED COMPONENTS OF DATA CHARTS

The following **MUST** be included on each data chart:

- (1) student's name,
- (2) date- month, day, and year for each trial/session,
- (3) date instruction started,
- (4) objective being assessed,
- (5) a key for interpreting the data chart notations, including levels of prompts,
- (6) the mastery criterion performance circled,
- (7) the page number that corresponds with the table of contents,
- (8) the specific words, behavior, or skill that is being assessed, (representing the target observable and measurable student response), and
- (9) grade-level alignment and connection to curriculum and materials.

Figure 7-3 on page 7-11 contains some additional information to help TETs with their data collection activities. Figures 7-4 through 7-11 on pages 7-12 through 7-19 present examples of completed data charts.

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Figure 7-3: Data Collection

Data collection is an essential component in documenting the attainment of Mastery Objectives for the ALT-MSA and goes beyond the recording of grades on tests, assignments, or homework. It is defined as continuous, systematic, and objective quantification of (a) student responses and (b) student products.

The collection of data on student behavior is necessary for many reasons:

- Both IDEA and NCLB regulations require that special education teachers collect instructional data on their students.
- It establishes student progress based on fact and guides teachers in determining the effectiveness of their instructional procedures, adaptations, accommodations, modifications, and use of assistive technology.
- Data collection of student responses provides helpful information to make good instructional decisions for developing, monitoring, and evaluating IEPs and other accountability measures such as ALT-MSA.
- Data collection helps teachers to better predict the future performance of their students for placement decisions; it produces an ongoing accountability system for teachers and their staff; and, it allows for dissemination of successful instructional results or procedures to share with other educational professionals and parents and guardians.

The four major types of data collected for instructional purposes include:

- Frequency, the number of times a behavior or behaviors occur within a specified period of time,
- Percentage, number of correct responses divided by the total number of responses,
- Rate, frequency of a behavior divided by a time measure, and
- Duration, total amount of time a behavior occurs.

Collecting data on student products, such as math worksheets or written responses to questions is easy because the products are tangible, and the teacher can record the outcome or student response after the behavior has occurred. (And of course any student response can be made permanent if it is video- or audiotaped.) However, observation of behaviors as they are occurring (e.g., sight word reading, yes/no verbal responses, nonverbal responses such as pointing to a correct response, using a calculator, or counting coins) is difficult to record because the behavior is transitory - lasting only a short period of time. The recording of transitory behaviors requires the continuous attention of the teacher, must be measured as the behavior occurs, and may be unreliable because of the transitory nature. For example, unless someone else is observing and recording the behavior, it is impossible to confirm its occurrence. Because the recording of transitory behaviors runs the risk of being unreliable, the following recommendations are advised when collecting data on transitory student behaviors:

- The transitory behavior to be observed must be well-defined, such as the measurable, observable student response written in the student's Mastery Objective.
- Data on the student's response must be recorded as soon as it occurs. Teachers should not wait until later to record the student response(s) to avoid the risk of forgetting what happened or making an error in recording.
- Student responses should be observed and recorded across many observations not just when the student reaches mastery criterion. Ideally, continuous data collection is recommended, that is data are collected each time the Mastery Objective is taught.
- If continuous data collection is not possible, student responses should be observed and recorded across consecutive observations as the student approaches his or her criterion for mastery. A minimum of three to five consecutive observations on different days is recommended to establish reliable data and show factual acquisition of the Mastery Objective.

References

Alberto, P.A., & Troutman, A.C. (2003). *Applied Behavior Analysis for Teachers* (6th ed). New York: Merrill Publishing Co.
Snell, M.E., & Brown, F. (2000). *Instruction of students with severe disabilities* (5th ed.). Upper Saddle River, NJ: Prentice-Hall, Inc.

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Figure 7-4

Student: Amy **Grade Level Connection:** Reading and 5th Grade Science Unit
Date Started: October 10, 2005 (New Vocabulary Introduction)

Mastery Objective: Given 6 word cards and 6 picture symbol cards from the Life Science Unit, Amy will place each word card on top of the correct picture symbol card with 100% accuracy on 2 consecutive days.

KEY:

- (+) = correct independent response
- (-) = incorrect response
- (G) = gesture prompt needed
- (V) = verbal prompt needed
- (M) = model prompt needed
- (P) = full physical prompt needed

Date:

<i>Steps</i>	10/12/05 W	10/13/05 Th	10/17/05 M	10/18/05 T	10/20/05 Th	10/27/05 Th	10/31/05 M
Unit: Science: Life Science A. Cellular – Plants (organisms)							
1. Root	P	M	G	M	V	+	+
2. Stem	M	M	+	+	+	+	+
3. Flower	G	+	+	V	+	+	+
4. Fruit	+	+	+	+	+	+	+
5. Light	+	+	P	+	+	+	+
6. Water	+	+	+	P	+	+	+
Total Independent:	3/6	4/6	4/6	3/6	5/6	6/6	6/6
Percent Independent:	50%	66%	66%	50%	83%	100%	100%*
Mastered Yes/No	No	No	No	No	No	No	Yes

*Student meets criterion of matching words to definitions independently for 2 opportunities.

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Figure 7-5

Student: Anna **Grade Level Connection:** Reading and 5th Grade Science Unit
Date Started: October 10, 2005 (New Vocabulary Introduction)

Mastery Objective: Given 4 textured picture symbol cards with words from the Life Science Unit and a plant, Anna will place the picture symbol cards next to the plant part with 1 gesture prompt, with 100% accuracy on 2 consecutive days.

Task Direction: Teacher says, “Anna, match the picture symbol cards to the plant part.”

KEY:

- (+) = correct independent response
- (-) = incorrect response
- (G) = gesture prompt needed
- (V) = verbal prompt needed
- (P) = partial prompt needed
- (FP) = full physical prompt needed

Instructional Topic	Unit: Science: Life Science A. Cellular – Plants								
Vocabulary Words	10/10/05 M	10/11/05 T	10/12/05 W	10/13/05 TH	10/14/05 F	10/17/05 M	10/18/05 T	10/19 /05 W	10/20/05 TH
1. Root	P	P	G	G	+	P	G	+	G
2. Stem	P	P	P	G	G	+	+	G	+
3. Flower	P	G	G	P	G	+	G	+	+
4. Fruit	G	+	G	+	+	+	+	+	+
Total Correct:	1/4	2/4	1/4	2/4	3/4	3/4	3/4	4/4	4/4
Percent Correct:	25%	50%	50%	50%	75%	75%	75%	100%*	100%*
Mastered Yes/No	no	no	no	no	no	no	no	no	yes

*Student meets criterion by correctly matching 4 words to plant parts for 2 opportunities.

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Figure 7-6

Student: Jamal **Grade Level Connection:** Reading and 7th Grade Life Science
Date Started: Nov. 2, 2005

Mastery Objective: Given picture symbol directions for 2 science investigations, Jamal will read each step orally and complete each of the 3 steps for the 2 science investigation with 80% accuracy.

KEY: (+) = Correct response
 (G) = Gesture
 (V) = Verbal - "What's next"?
 (M) = Model prompt demonstrating the step.

Dates

<i>Steps</i>	11/2/05 W	11/4/05 F	11/7/05 M	11/9/05 W	11/11/05 F	11/14/05 M	11/16/05 W	11/18/05 F
Investigation Steps	Plants & Water	Plants & Water	Plants & Water	Plants & Water	Plants & Light	Plants & Light	Plants & Light	Plants & Light
1. Reads step #1 orally	V	+	+	+	+	+	+	+
2. Completes step #1	V	+	V	+	V	G	+	+
3. Reads step #2 orally	+	+	V	V	+	+	+	+
4. Completes step #2	V	V	+	+	M	V	V	+
5. Reads step #3 orally	V	V	+	+	+	+	+	+
6. Completes step #3	+	+	M	+	+	V	V	+
Total Accurate:	2/6	4/6	3/6	5/6	4/6	3/6	4/6	6/6
Percent Accurate:	33%	66%	50%	83%	66%	50%	66%	100%*
Mastered Yes/No	no	no	no	no	no	no	no	yes

*Student meets criterion of 80% accuracy for 2 science investigations.

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Figure 7-7

Student: Jeremy **Grade Level Connection:** Reading and Grade 7 Life Science
Date Started: Nov. 2, 2005

Mastery Objective: Given the IntelliKeys®, and an overlay with the 3 steps of an adapted science investigation from the Life Science Unit, Jeremy will read each step of the science investigation by touching the icon on the keyboard and then complete each step with 1 partial physical and 2 gesture prompts with 83% accuracy.

KEY: (+) = correct response
 (-) = incorrect response
 (GP) = gesture prompt
 (VP) = verbal prompt
 (M) = model prompt
 (P) = partial physical prompt
 (FP) = full physical prompt

Dates:

<i>Steps</i>	11/2/05 W	11/4/05 F	11/7/05 M	11/9/05 W	11/11/05 F	11/14/05 M
Investigation topic	Plants & Water	Plants & Water	Plants & Water	Plants & Water	Plants & Water	Plants & Water
1. Touches the IntelliKeys® to read step #1.	FF	P	P	G	G	+
2. Complete step #1.	FF	FP	FP	FP	P	G
3. Touches the IntelliKeys® to read step # 2.	FF	G	G	G	+	+
4. Complete step #2.	FF	P	FP	FP	FP	P
5. Touches the IntelliKeys® to read step #3.	FF	G	G	+	+	+
6. Complete step #3.	P	FP	FP	P	P	FP
Total Accurate	1/6	3/6	3/6	4/6	4/6	5/6
Percent Accurate	17%	50%	50%	67%	67%	83% *
Mastered Yes/No	no	no	no	no	no	yes

*Student meets criterion of 83% accuracy for 1 investigation.

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Figure 7-8

Student: Alice

Grade Level Connection: Math and 4th Grade Social Studies Unit

Date Started: October 3, 2005

Mastery Objective: Given bar graphs displaying data from a social studies unit, Alice will answer 5 questions about the data by stating the correct answer with 80% accuracy.

Task Direction: "Alice, look at the data chart and tell me the answer to the following questions."

KEY: (+) = correct response
 (G) = gesture prompt (Teacher taps on the graph.)
 (V) = verbal prompt (Teacher says "look at the graph.")
 (M) = model prompt (Teacher demonstrates where to place fingers on the graph.)
 (P) = partial physical prompt (Teacher touches student's hand.)
 (FP) = full physical prompt (Teacher takes student's hand and assists student in completing the step.)

<i>Steps/Date</i>	10/3/05 Monday	10/10/05 Monday	10/17/05 Monday	10/24/05 Monday	10/31/05 Monday	11/7/05 Monday
<i>Questions</i>	The Population of Local Communities from the 2000 Census					
1. Which city has the most people? <i>A – Baltimore City</i>	+	FP	+	+	+	+
2. Which city has the fewest people? <i>A – Ocean City</i>	M	+	+	+	+	+
3. Which city has more people Annapolis or Frederick? <i>A – Frederick</i>	FP	P	M	M	M	+
4. Which city has fewer people your city, Gaithersburg or Annapolis? <i>A- Annapolis</i>	+	M	+	+	M	M
5. Do more people live in your city, (Gaithersburg) than in Ocean City? <i>A – yes</i>	V	+	M	V	+	+
Total Accurate	2/5	2/5	3/5	3/5	3/5	4/5
Percent Accurate	40%	40%	60%	60%	60%	80%*
Mastered Yes/No	no	no	no	no	no	yes

*Student meets criterion with 80% accuracy.

ALT-MSA 2006 HANDBOOK PART 7:
COORDINATING INSTRUCTION AND SELECTING ARTIFACTS THAT DEMONSTRATE
ATTAINMENT OF ALT-MSA 2006 MASTERY OBJECTIVES

Figure 7-9

Student: Yashmin

Grade Level Connection: Math and 4th Grade Social Studies Unit

Date Started: October 3, 2005

Mastery Objective: Given a bar graph displaying data from a social studies unit and 2 Big Mack© devices programmed with yes/no, Yashmin will answer 3 questions about the data by pressing the correct Big Mack© with 1 partial physical and 1 gesture prompt with 100% accuracy for 2 consecutive days.

Task Direction: “Yashmin look at the bar graph and tell me the answer to the following questions.”

KEY: (+) = correct response
 (-) = incorrect response
 (G) = gesture prompt (Teacher taps on the bar graph or near the Big Macks©)
 (V) = verbal prompt (Teacher says “look at the graph” or repeats the question)
 (P) = partial physical prompt (Teacher touches the student’s hand)
 (FP) = full physical prompt (Teacher takes student’s hand and assists student)

<i>Questions & Correct Answer</i>	10/3 /05 M	10/3 /05 M	10/4 /05 T	10/4 /05 T	10/5 /05 W	10/5 /05 W	10/5 /05 W	10/06 /05 Th	10/06 /05 Th	10/06/ 05 Th	10/07 /05 F
1. Does Baltimore City have more people than Annapolis? A – Yes	FP	P	P	P	G	P	G	P	+	+	+
2. Does Annapolis have more people than your city, Gaithersburg? A – no	P	FP	P	P	P	P	P	P	FP	P	P
3. Does Gaithersburg have more people than Ocean City? A - yes	FP	FP	P	P	FP	G	P	P	V	G	+
Total Accurate	1/3	1/3	1/3	1/3	2/3	2/3	2/3	1/3	1/3	3/3	3/3
Percent Accurate	33%	33%	33%	33%	67%	67%	67%	67%	67%	100%	100% *
Mastered Yes/No	no	no	no	no	no	no	no	no	no	yes	yes

*Student meets criterion with 100% accuracy for 2 consecutive days.

ALT-MSA 2006 HANDBOOK PART 7:
COORDINATING INSTRUCTION AND SELECTING ARTIFACTS THAT DEMONSTRATE
ATTAINMENT OF ALT-MSA 2006 MASTERY OBJECTIVES

Figure 7-10

Student: Andrea

Grade Level Connection: Mathematics Grade 4 (real money used)

Start Date: Dec 5, 2005

Mastery Objective: Given a minimum of 3 opportunities each week to purchase different items using a \$5.00 bill, Andrea will count her change and state if it is the correct amount with 100% accuracy for 3 weeks.

Task Direction: Once Andrea receives her change, The teacher says, “Andrea, please count your change. Is it correct?”

KEY: (+) = correct response
 (V) = verbal prompt (Teacher states amounts of coins or assists in addition)
 (V/PP) = verbal and partial physical prompt
 (NO) = no opportunity during the week

During the week of:

Student can count change after purchasing:	12/5-12/9/05	12/12-12/16/05	12/19-1/23/05	1/9-1/13/06	1/16-1/20/06	1/23-1/27/06	1/30-2/3/06
1. Lunch in School Cafeteria	V	+	V	+	+	+	+
2. States correct amount	V	+	+	+	+	+	+
3. Supplies from the School Store	V/PP	+	+	V	+	+	+
4. States correct amount	+	+	+	+	+	+	+
5. Drink at work site	+	V	+	+	NO	+	+
6. States correct amount	+	V	+	+	NO	+	+
7. Other:	+(agenda book)	+(team button)	+(T-shirt)	NO	+(poster)	NO	+(dance ticket)
8. States correct amount	V	+	+	NO	+	NO	+
Total Accurate:	4/8	6/8	7/8	5/6	6/6	6/6	8/8
Percent Accurate:	50%	75%	87.5%	83%	100%	100%	100%*
Mastered yes/no	no	no	no	no	no	no	yes

*Student meets criterion of 100% accuracy for 3 weeks.

ALT-MSA 2006 HANDBOOK PART 7:
COORDINATING INSTRUCTION AND SELECTING ARTIFACTS THAT DEMONSTRATE
ATTAINMENT OF ALT-MSA 2006 MASTERY OBJECTIVES

Figure 7-11

Student: Rachel

Grade Level Connection: Mathematics Grade 3 (real money used)

Start Date: Dec 5, 2005

Mastery Objective: Given 2 sets of mixed currency, Rachel will count each set and select the amount needed to purchase an item in the school store with 1 partial physical prompt at 100% accuracy for 2 consecutive days.

Task Direction: "Rachel, count these sets of money and select the amount you need to buy _____"

KEY: (+) = correct response
 (-) = incorrect response
 (P) = partial physical prompt
 (FP) = full physical prompt

Dates:

Task/ Response	12/5/ 05 M	12/6/ 05 T	12/7/ 05 W	12/8/ 05 TH	12/9/ 05 F	12/12/ 05 M	12/13/ 05 T	1/11/ 05 W	1/16/ 06 TH	1/18/ 06 F	1/23/ 06 M	1/25/ 06 T
Correct amount	\$1.50	\$2.50	\$2.50	\$1.50	\$1.50	\$2.50	\$1.50	\$2.50	\$2.50	\$1.50	\$1.50	\$2.50
1. Counts \$1.50	FP	FP	FP	FP	P	P	FP	P	P	P	+	p
2. Counts \$2.50	FP	FP	FP	FP	FP	FP	P	P	P	P	P	+
3. Selects the correct amount	FP	FP	FP	P	FP	P	P	+	P	+	+	+
Total correct	0/3	0/3	0/3	1/3	1/3	1/3	1/3	2/3	1/3	2/3	3/3	3/3
Percent Accurate	0%	0%	0%	33%	33%	33%	33%	67%	33%	67%	100%	100%*
Mastered Yes/No	no	no	no	no	no	no	no	no	no	no	no	yes

*Student meets criterion with 100% accuracy for 2 consecutive days.